SERVICE MANUAL

Cable kit, service PC

4522 980 38603

Contents:

PMSN Best

Cable kit, service PC

SERVICE MANUAL
CABLE KIT, SERVICE PC
TYPE NO.   : 4522 980 38603

Manual Order number: 4522 981 04114   Date: March 2006

1. INTRODUCTION AND TECHNICAL INFORMATION.

1.1 PURPOSE AND REPLACEMENT

This cable kit enables the service engineer to connect the service PC with all PMS systems (X-ray and non X-ray!).

Replacement:
Version 4522 980 38603 replaces kit 4522 980 38601 and 4522 980 38602 and includes the special null modem connectors 11-12 for the Integris Allura (xper system) and a RJ-45 cross-cable+ RJ-45 cable coupler.

Order separately:
Connectors 11-12 can also be ordered separately to upgrade the cable kit 4522 980 38601.
The order number to receive both 11-12 null modem connectors = 8122 102 75581.
The cross-cable upgrade kit can also be ordered separately to upgrade the cable kit 4522 980 38602.
The order number to receive the cross-cable upgrade kit = 8122 102 76701.

1.2 TECHNICAL DATA.

Manufacturer : Philips Medical Systems
P.O. Box 10.000
5680 DA Best
The Netherlands

Tool name : Cable kit, service PC
Tool Code : TC003
Order number : 4522 980 38603 The parts of the kit can't be ordered separately! (except for connector 11-12 and the cross-cable upgrade kit)

Specification.
Weight : 300gr.
Dimensions (case) : 240L. x 170W. x 35H. [mm]
Spare part(s) : no
Options : no

1.3 ITEMS SUPPLIED.

The cable kit consists of:
- RJ-45 cable 5m long (1x)
- RJ-45 cross-cable 1m long (1x)
- RJ-45 cable coupler
- 9 pole Female D-connector to RJ-45 adapter (3x)
- 9 pole Male D-connector to RJ-45 adapter (2x)
- 25 pole Female to RJ-45 adapter (2x)
- 25 pole Male to RJ-45 adapter (6x)
- Carrying case (hard plastic)
- Service manual

1.4 CABLE KIT ON INTRANET – PMS TOOL CATALOGUE

An up-to-date overview concerning the use of the service PC cable kit can be found in the PMS Tool Catalogue. The Tools Catalogue is accessible via the *Service Technical Support Website*;

Address: http://pww.toolcatalogue.service.ms.philips.com

The cable kit is known in the Tool Catalogue with toolcode TC003.

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1.5 OPERATION.

The set is based on the use of one 5m RJ-45 cable that can be plugged directly into a 9-pole or a 25-pole sub D-connector. The connectors are internally configured for one or more specific PMS systems and marked according to the type of equipment that they will function with (most of the connectors are used for several systems).

No.	Label	Remark
0	**PC**	• PC connector
1		• D76 - D76+ • DVI - ARC • Bucky Diagnost
2	**1:1**	• DCI - DSI • CPE release 6 • SYSCO - VISUB - GECO / IDSC • T5/ACS - R2 and R3 (terminal TOC TC:X5) • Ext. Modem • Inturis on-line (R2) WSC
3	**CPE**	• CPE up till release 5.x
4	**GEN**	• SCP - MCP - MCM
5		• D94 - D96 - D97 - MD3 - MD4 • Omni Diagnost User interface • Integris V/H LUC's (see also 11-12 for Integris) • CD medical interface box - VISUB • High Speed Dicom image interface (FNIB) - VISUB • Tomoscan M/EG • NT (BIB:X4) • Null modem cable between two PC's
6		• OPTIMUS generators up till release 2 • Uro Diagnost
7		• OPTIMUS generators from release 3 • Acquisitie Console New (ACN) • T5/ACS - R2 and R3 (terminal CXY08)
8		• Easy Vision • BV 300 / BV Family R. 1.1
9	**GCF**	• Grid Controlled Fluoroscopy (SCP) • Tomoscan M/EG
		•
		•
10		• BV 300 / BV Family R. 1.1 • Bucky DIAGNOST TH - Easy DIAGNOST - Duo DIAGNOST • Omni Diagnost Geo controller RE1-X20 • T5 - R3 (DEC 3000-400) • NT (DEC 3000-600) • NT Diagnostic Workstation (DEC 3000-300) • Platinum, P700
11		• Null modem PC 9 –pole male • Integris Allura (xper system)
12		• Null modem PC 9 – pole female • Integris Allura (xper system)
13	**Cross-link**	• RJ-45 cable coupler with RJ-45 Cross-cable (1meter) • BV Family R. 1.2 / R. 2.x

All **remarks** regarding the application of the cable kit can be sent to the Lead office Tools (see chapter 3).

2. Overview of defined cables in "Cable kit, service PC".

Cable 1:   9 pole Female to 25 pole Male, null modem cable
Cable 2:   9 pole Female to 25 pole Male, one-to-one connection
Cable 3:   9 pole Female to 25 pole Male, special configured for CPE
Cable 4:   9 pole Female to 25 pole Male, special configured for generator
Cable 5:   9 pole Female to 9 pole Female, null modem cable
Cable 6:   9 pole Female to 9 pole Male, null modem cable
Cable 7:   9 pole Female to 25 pole Female
Cable 8:   9 pole Female to 25 pole Male, standard PMS cable
Cable 9:   9 pole Female to 25 pole Male, special configured for GCF
Cable 10:   9 pole Female to 25 pole Female, standard PMS cable
Cable 11:   9 pole Female to 9 pole Male, null modem cable
Cable 12:   9 pole Female to 9 pole Female, null modem cable
Cable 13:   RJ-45 Cross-link cable

Cable 1:   null modem cable.

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

CD	1		8	CD (not used)
Rx	2	—————————	2	Tx
Tx	3	—————————	3	Rx
DTR	4	—————————	6	DSR
GND	5	—————————	7	GND
DSR	6	—————————	20	DTR
RTS	7	—————————	5	CTS
CTS	8	—————————	4	RTS

- D76 - D76+
- DVI - ARC
- Bucky Diagnost

Cable 2:   one-to-one connection cable.

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

CD	1		8	CD (not used)
Rx	2	—————————	3	Rx
Tx	3	—————————	2	Tx
DTR	4	—————————	20	DTR
GND	5	—————————	7	GND
DSR	6	—————————	6	DSR
RTS	7	—————————	4	RTS
CTS	8	—————————	5	CTS

- DCI - DSI
- CPE release 6
- SYSCO - VISUB - GECO / IDSC
- T5/ACS - R2 and R3 (terminal TOC TC:X5)
- Ext. Modem
- Inturis on-line (R2) WSC

Cable 3:   CPE cable.

Identical to cable 1 except for the RTS /CTS connection

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

```
CD    1                          8    CD (not used)
Rx    2   ───────────────       2    Tx
Tx    3   ───────────────       3    Rx
DTR   4   ───────────────       6    DSR
GND   5   ───────────────       7    GND
DSR   6   ───────────────       20   DTR
RTS   7   ┐               ┌      5    CTS
CTS   8   ┘               └      4    RTS
```

- CPE up till release 5.x

Cable 4:   generator cable.

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

```
CD    1                          N.C.
Rx    2   ───────────────       2    Tx
Tx    3   ───────────────       3    Rx
DTR   4   ───────────────       8    CD
GND   5   ───────────────       7    GND
DSR   6   ───────────────┐      6    DSR
                         └      20   DTR
RTS   7   ───────────────       5    CTS
CTS   8   ───────────────       4    RTS
```

- SCP - MCP - MCM

Cable 5:   null modem cable.

Service PC   *PMS system side*
9p Female D-connector   9p Female D-connector

```
CD    1                          N.C.
Rx    2   ───────────────       3    Tx
Tx    3   ───────────────       2    Rx
DTR   4   ───────────────       6    DSR
GND   5   ───────────────       5    GND
DSR   6   ───────────────       4    DTR
RTS   7   ───────────────       8    CTS
CTS   8   ───────────────       7    RTS
```

- D94 - D96 - D97 - MD3 - MD4
- Omni Diagnost User interface
- All Integris V/H LUC's
- CD medical interface box - VISUB
- High Speed Dicom image interface (FNIB) - VISUB
- Tomoscan M/EG
- NT (BIB:X4)
- Null modem cable between two PC's

Cable 6:   null modem cable.
Identical to cable 5 but 9p Male in stead of 9p Female connector

Service PC   *PMS system side*
9p Female D-connector   9p Male D-connector

CD	1		N.C.	
Rx	2	———————	3	Tx
Tx	3	———————	2	Rx
DTR	4	———————	6	DSR
GND	5	———————	5	GND
DSR	6	———————	4	DTR
RTS	7	———————	8	CTS
CTS	8	———————	7	RTS

- OPTIMUS generators up till release 2
- Uro Diagnost

Cable 7:

Service PC   *PMS system side*
9p Female D-connector   25p Female D-connector

CD	1		N.C.	
Rx	2	———————	2	Tx
Tx	3	———————	3	Rx
DTR	4	———————	8	CD
GND	5	———————	7	GND
DSR	6	———————	20	DTR
RTS	7	———————	5	CTS
CTS	8	———————	4	RTS

- OPTIMUS generators from release 3
- Acquisitie Console New (ACN)
- T5/ACS - R2 and R3 (terminal CXY08)

Cable 8:   standard PMS cable (X-Scope compatible).
(conform V24 / RS 232 standard -- Full-handshake null modem cable)

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

CD	1		20	DTR
Rx	2	———————	2	Tx
Tx	3	———————	3	Rx
DTR	4	———————	6	DSR
			8	CD
GND	5	———————	7	GND
DSR	6			
RTS	7	———————	5	CTS
CTS	8	———————	4	RTS

- Easy Vision
- BV 300 / BV Family R. 1.1

Cable kit, service PC

Cable 9:   Grid Controlled Fluoro cable.

Service PC   *PMS system side*
9p Female D-connector   25p Male D-connector

```
CD    1                         N.C.
Rx    2  ─────────────────── 2    Tx
Tx    3  ─────────────────── 3    Rx
DTR   4 ─┐
GND   5 ─┼───────────────── 7    GND
DSR   6 ─┘
RTS   7 ─┐
CTS   8 ─┘
```

- Grid Controlled Fluoroscopy (SCP)
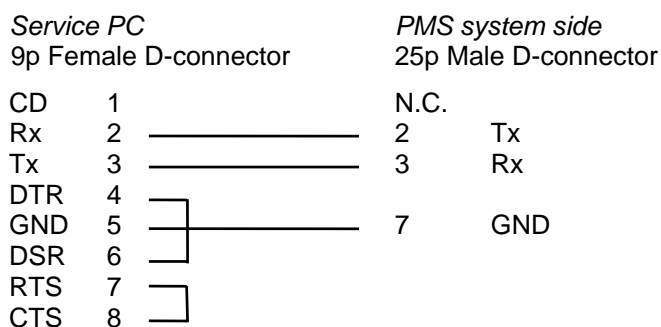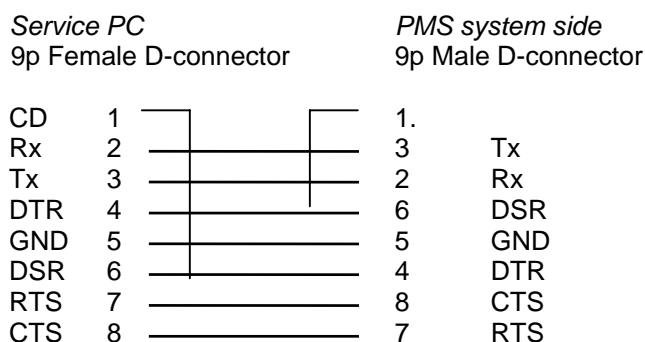- Tomoscan M/EG (motor controller)

Cable 10:   standard PMS cable (X-Scope compatible).
(conform V24 / RS 232 standard -- Full-handshake null modem cable)

Service PC   *PMS system side*
9p Female D-connector   25p Female D-connector

```
CD    1 ─┐                       20    DTR
Rx    2  ┼──────────────────── 2     Tx
Tx    3  ┼──────────────────── 3     Rx
DTR   4  ┼────────────────┐     6     DSR
                          └──── 8     CD
GND   5  ┼──────────────────── 7     GND
DSR   6 ─┘
RTS   7 ───────────────────── 5     CTS
CTS   8 ───────────────────── 4     RTS
```
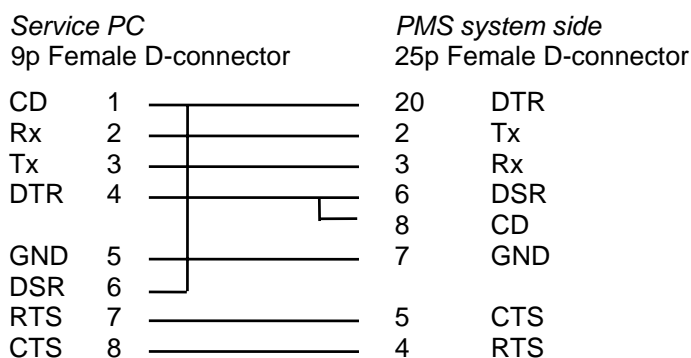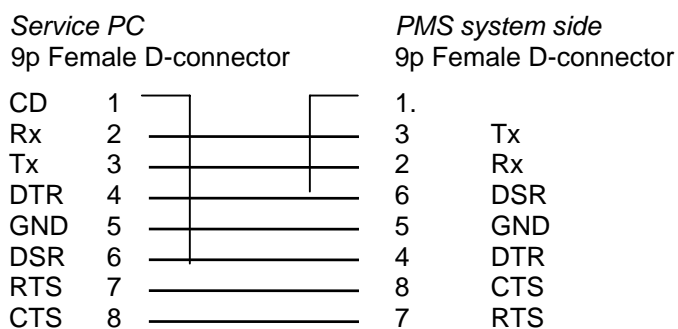
- BV 300 / BV Family R. 1.1
- Bucky DIAGNOST TH
- Easy DIAGNOST
- Duo DIAGNOST
- Omni Diagnost Geo controller RE1-X20
- T5 - R3 (DEC 3000-400)
- NT (DEC 3000-600)
- NT Diagnostic Workstation (DEC 3000-300)
- Ultrasound: Platinum, P700

Cable 11:   null modem cable.

Service PC   *PMS system side*
9p Female D-connector   9p Male D-connector

```
CD    1 ─┐               ┌───── 1.
Rx    2  ┼──────────┼──── 3     Tx
Tx    3  ┼──────────┼──── 2     Rx
DTR   4  ┼──────────┘     6     DSR
GND   5  ┼──────────────── 5     GND
DSR   6 ─┘               4     DTR
RTS   7 ───────────────── 8     CTS
CTS   8 ───────────────── 7     RTS
```

- Integris Allura (xper system)

Cable 12:   null modem cable.

Service PC
9p Female D-connector

PMS system side
9p Female D-connector

CD	1		1.	
Rx	2		3	Tx
Tx	3		2	Rx
DTR	4		6	DSR
GND	5		5	GND
DSR	6		4	DTR
RTS	7		8	CTS
CTS	8		7	RTS

- Integris Allura (xper system)

Cable 13:   RJ-45 Cross-link network cable

Service PC
RJ-45 connector

PMS system side
RJ-45 connector

TD+	1		1	TD+
TD-	2		2	TD-
RD+	3		3	RD+
n/c	4		4	n/c
n/c	5		5	n/c
RD-	6		6	RD-
n/c	7		7	n/c
n/c	8		8	n/c
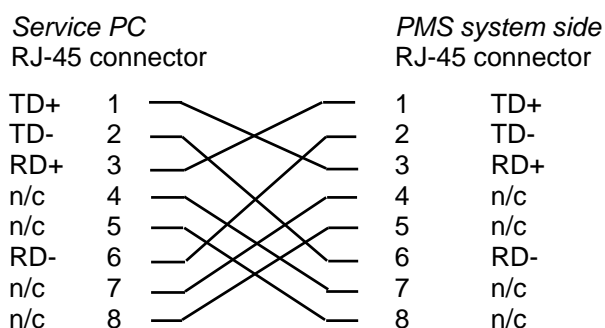
- BV Family R. 1.2 or 2.x system

3. Lead office Tools.

Any Questions or suggestions to improve?

please contact:

GSC Helpdesk   mailto:gcs.helpdesk@philips.com